

REMARKS

Applicants respectfully submit this RCE in accordance with 37 C.F.R. § 1.114. With this RCE, Applicants have amended claims 1, 10, 12, 14, and 18, cancelled claims 2 and 11 without prejudice, and added new claims 21 and 22. Upon entry of the amendments, claims 1, 3-10, and 12-22 will be pending in the present application. In view of the foregoing amendments and the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims. Moreover, Applicants thank the Examiner for noting the allowable subject matter of claims 3-9, 11, 12, 14, 17-20.

Objections to the Drawings and Claims

The Examiner objected to the drawings for allegedly failing to illustrate a rack and pinion to drive the seal assembly, despite the specification stating that a rack and pinion are a mechanical equivalent to a hydraulic piston in a cylinder, which is shown in Figure 8. Applicants traverse this requirement, as those skilled in the art would readily see how a driven pinion can translate a rack attached to the seal assembly. Nonetheless, claim 12 has been amended to recite that a mechanical force applied to the seal assembly, and this amendment renders the Examiner's object moot and is fully illustrated by Fig. 8 of the application, for example. Moreover, Applicants respectfully submit that the claim amendment captures in scope a hydraulic assembly as well as an equivalent rack and pinion assembly.

The Examiner also objected to the drawings on the issue of releasing the lock. This is a feature already in the drawings where lock ring 54 is released to jump into recess 56 by the movement of sleeve 52 away from it. It is clearly shown and described in a way that is readily understood by those skilled in the art. This objection and the related objections to claims 14 and 17 are respectfully traversed. Reconsideration and allowance are respectfully requested.

The Examiner further objected to the drawings for being informal. With this RCE, Applicants respectfully submit replacement sheets 1-13, which formalize and replace all previously submitted figures.

The objection to claim 2 is well taken, and that claim is cancelled without prejudice.

Claim Rejections

There continues to be a basic misreading of Vallet when applied to claim 1. The language of claim 1 has been streamlined to avoid redundancy without changing its scope. Vallet has a packer 16 that secures the string 14 downhole. Claim 1 has separate steps for securing the string and securing the sealing assembly. In Vallet the string 14 is secured downhole by the packer 16. Separately, and only because tension has already been pulled at hook 42, does the seal assembly 18 rise from the Figure 2 to the Figure 3 position, allowing the pins 36 to then lock the seal assembly 18. By this time, the string 14 is already locked downhole with packer 16. Pins 36 are in the wellhead, a part of which is tubing spool 10, and not located downhole. Therefore, pins 36 can't be read as securing the string downhole. In other words, the engagement of pins 36 of Vallet with the seal assembly 18 cannot be equated with the recited step of securing a string downhole.

As described in the specification, in accordance with an exemplary embodiment, the hanger 40 has seals 44 and 46 and is locked to the wellhead. Vallet's comparable structure to the claimed seal assembly is item 18, which carries seal 24. Item 18, however, is only locked to the wellhead 10 as a result of a pulling force on hook 42 that raises assembly 18 high enough so pins 36 can catch groove 20 on seal assembly 18 of Vallet for a travel stop so pins 38 can lock it into the wellhead 10. Pins 39 simply drive ring 26 into seal 24 to push seal 24 into sealing contact but only after the sealing assembly of Vallet 18 is already tensioned and secured by pins 36 acting as a travel stop and pins 38 actually locking. Pins 39 actuate a seal into the wellhead after tensioning but claim 1 claims the seal assembly, a structure that incorporates the seal, needing to be secured before tensioning.

In short, claim 1 recites that the string and the seal assembly are secured before tension is applied and retained. Vallet secures the string only at packer 16 before applying tension and not the seal assembly 18 or the seal 24. Pin 36 is simply a travel stop that stops seal assembly 18 as it is being tensioned so pin 38 can lock in the tension. Pins 36 and 38 are in the wellhead, not

downhole. The Examiner simply needs to find a better reference than Vallet, as Vallet fails to disclosed the recited features of claim 1.


As a practical matter, Vallet must carefully set packer 16. If he sets it too low, he will pull the tubing 14 to shear failure. If he sets it too high, there will not be enough tension on string 14 before seal assembly 18 is secured. The method of claim 1 secures the string downhole and the seal assembly and then applies the required tension cutting out the precision and guess work inherent in proper placement of packer 16 to get the desired tension. With the foregoing in mind, Applicants submit that claim 1 is clearly novel over Vallet.

Claim 10 is different than claim 1 in that the seal assembly is not in the wellhead when the tension is applied but thereafter is advanced into the wellhead. Claim 10 and other claims with identical wording have been amended to make the language clearer. The seal assembly is advanced into the wellhead after tensioning. Vallet simply can't do this. He has to move the seal assembly into or even below (see dashed outline of assembly 18 in Figure 2) before he can pull tension as he must raise the assembly 18 into the wellhead while under tension so that it can be secured. Claim 10 has the seal assembly not advanced into the wellhead until after tension is applied. Here again claim 10 exhibits the versatility that Vallet cannot. In claim 10 the desired tension with the seal assembly out of the wellhead is pulled and then the seal assembly is moved into position in the wellhead regardless of the motion from the tension. Vallet, again, has to properly set the packer to get the right tension. He has to get the seal assembly into or even below the wellhead to start with and suffers if the packer placement is off. Claim 10 is not anticipated by Vallet either.

Moreover, Applicants respectfully submit that, in view of the foregoing, new claim 22 is patentable over Vallet as well as the prior art in general. Allowance of all pending claims is respectfully requested. Moreover, if it is believed that a telephonic interview will assist in advancing the pending claims toward allowance, the Examiner is sincerely invited to call the undersigned at the number listed below.

Respectfully submitted,

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